

### **REMARKS**

Applicant thanks the Examiner for the Interview held on January 22, 2009 and for indicating that the proposed amendments would overcome the art of record.

Claims 1-26 are pending. By this amendment, claims 1, 15, 19-20, and 24 are amended to more precisely recite the novel features of the present application. Support for the claim amendments can be found at least in paragraph [0015] of the specification. No new matter is introduced. Reconsideration and issuance of a Notice of Allowance are respectfully requested.

#### **35 U.S.C. § 103 Rejections**

On page 2 the Office Action rejects claims 1-3, 6-15, 19-20, and 24-26 under 35 U.S.C. §103(a) over U.S. Patent 6,965,076 to Wu (hereafter Wu) in view of U.S. Patent 5,615,081 to Ma (hereafter Ma). On page 3 the Office Action asserts that Wu teaches “a node support (i.e. the electrical circuitry membrane that is located in the lower enclosure) located in the second cavity (i.e. the lower enclosure) and operable to support the second node of the circuit when the circuit is disposed in the first cavity (i.e., the top module which include rubber sheet and the switches over the sheet) (see Fig. 2d, Col. 5, Lines 27-55). Also, while the Office Action acknowledges on page 3 that Wu does not teach “the second cavity in a lower enclosure for stiffening the lower enclosure and for providing a passage for one or more cables that couple the keyboard to a processor,” the Office Action asserts that Ma teaches this limitation. This rejection is respectively traversed.

Wu is directed to a modular computer keyboard assembly that separates keyboard components into two groups. Applicant respectfully submits that when the Office Action asserts that Wu teaches a node support, the Office Action fails to address the additional limitations added in the September 11, 2008 Response, i.e., “a node support ... to ensure contact between the first and second nodes is maintained when the circuit disposed in the first cavity generates the signal.” As noted in the September 11, 2008 Response, Applicant respectfully traverses the assertion that Wu’s electrical circuitry membrane of Figure 2d is a node support. The electrical circuitry membrane of Figure 2d of Wu “electronically determine[s] which of the keycap is being pressed down and send[s] that information to the computer for further processing.” See Wu, column 3, lines 13-16. ***Electronically determining*** which keycap is being pressed is ***not providing physical support*** for a bottom node of the circuit to ***ensure contact*** between the bottom node and a top node ***is maintained when the circuit generates a signal***.

Ma is directed to a portable computer that includes a mechanism for connecting two sub-keyboards to a mainframe in order to provide a longer keyboard with keys larger than those of a portable computer. However, contrary to the Office Action's assertion on page 3, Ma does not disclose or suggest that the second cavity stiffens the lower enclosure and provides a passage for one or more cables that connect the keyboard to a processor. The elliptical depressions 111 of Ma are provided to accommodate gears 4 and the elliptical shaft holes 112 are provided to receive the shaft 42 of the gears 4. None of the cavities is provided to physically stiffen the lower enclosure and to provide a passage for one or more cables that electrically connect the keyboard to a processor. Indeed, nowhere does Ma discuss *cables* that *electrically connect* the keyboard (or sub-keyboards) to a processor. Instead, Ma's keyboards are *mechanically connected* to the portable computer using teeth 411 of sub-keyboards 3 and teeth 21 of the toothed blocks 2 of the portable computer 1.

To the contrary, claim 1 has been amended to more precisely recite the novel features of the present application and recites: "a region forming a second cavity in a lower enclosure for stiffening the lower enclosure and for providing a passage for one or more cables that electrically connect the keyboard to a processor; and a node support located in the second cavity and operable to provide physical support for the second node of the circuit to ensure contact between the first and second nodes is maintained when the circuit disposed in the first cavity generates the signal." As noted above and agreed upon during the Interview, Wu and Ma, individually and in combination, do not disclose or suggest these features. Therefore, amended claim 1 is patentable.

Amended claims 15, 19, 20, and 24 recite features similar to those of claim 1, and for this reason, claims 15, 19, 20, and 24 also are patentable.

Claims 2-3, 6-14, and 26 depend from patentable claim 1; claim 20 depends from patentable claim 19; and claim 25 depends from patentable claim 24. For these reasons and the additional features they recite, claims 2-3, 6-14, 20, and 25-26 also are patentable.

Withdrawal of the rejection of claims 1-3, 6-15, 19-20, and 24-26 under 35 U.S.C. §103(a) is respectfully requested.

On page 10 the Office Action rejects claims 16, 18, and 21-23 under 35 U.S.C. §103(a) over Wu in view of Ma, and further in view of U.S. Patent 5,865,546 to Ganthier et al. (hereafter Ganthier). This rejection is respectfully traversed.

Ganthier is directed to a modular keyboard that allows input device modules to be inserted into the keyboard assembly. However, Ganthier does not cure Wu and Ma's defect and does not disclose or suggest a second cavity, in addition to a first cavity in which a circuit

is disposed, located in a lower enclosure for stiffening the lower enclosure and for providing a passage for one or more cables that electrically connect the keyboard to a processor. Also, Ganthier does not disclose or suggest a node support located in the second cavity that provides physical support for a bottom node of the circuit to ensure contact between the bottom node and a top node is maintained when the circuit generates a signal. Therefore, amended claims 15 and 20 are patentable over Wu, Ma, and Ganthier.

Claims 16 and 18 depend from patentable claim 15; and claims 21-23 depend from patentable claim 20. For these reasons and the additional features they recite, claims 16, 18, and 21-23 also are patentable.

Withdrawal of the rejection of claims 16, 18, and 21-23 under 35 U.S.C. §103(a) is respectfully requested.

On page 12 the Office Action rejects claims 4-5 under 35 U.S.C. §103(a) over Wu in view of Ma, and further in view of [http://reviews.cnet.com/keyboards/apple-wireless-keyboard/4505-3134\\_7-30568482.html?tap=prod.img.1](http://reviews.cnet.com/keyboards/apple-wireless-keyboard/4505-3134_7-30568482.html?tap=prod.img.1) to Sheehan (hereafter Sheehan). This rejection is respectfully traversed.

Sheehan is directed to Apple's wireless keyboard. However, Sheehan does not cure Wu and Ma's defect and does not disclose or suggest a second cavity, in addition to a first cavity in which a circuit is disposed, located in a lower enclosure for stiffening the lower enclosure and for providing a passage for one or more cables that electrically connect the keyboard to a processor. Also, Sheehan does not disclose or suggest a node support located in the second cavity that provides physical support for a bottom node of the circuit to ensure contact between the bottom node and a top node is maintained when the circuit generates a signal. Therefore, amended claim 1 is patentable over Wu, Ma, and Sheehan.

Claims 4-5 depend from patentable claim 1. For these reasons and the additional features they recite, claims 4-5 also are patentable.

Withdrawal of the rejection of claims 4-5 under 35 U.S.C. §103(a) is respectfully requested.

On page 13 the Office Action rejects claim 17 under 35 U.S.C. §103(a) over Wu in view of Ma, and further in view of U.S. Patent 6,587,094 to Anderson (hereafter Anderson). This rejection is respectfully traversed.

Anderson is directed to a two-sided input keyboard that has first and second keyboards mounted so that their respective keys face in substantially opposite directions. However, Anderson does not cure Wu and Ganthier's defect and does not disclose or suggest a second cavity, in addition to a first cavity in which a circuit is disposed, located in a lower

enclosure for stiffening the lower enclosure and for providing a passage for one or more cables that electrically connect the keyboard to a processor. Also, Anderson does not disclose or suggest a node support located in the second cavity that provides physical support for a bottom node of the circuit to ensure contact between the bottom node and a top node is maintained when the circuit generates a signal. Therefore, amended claim 15 is patentable over Wu, Ma, and Anderson.

Claim 17 depends from patentable claim 15. For this reason and the additional features it recites, claim 17 also is patentable.

Withdrawal of the rejection of claim 17 under 35 U.S.C. §103(a) is respectfully requested.

### **Conclusion**

In view of the above remarks, Applicants respectfully submit that the application is in condition for allowance. Prompt examination and allowance are respectfully requested.

Should the Examiner believe that anything further is desired in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

Date: **February 13, 2009**

  
\_\_\_\_\_  
Kelly Lee Kasha  
Registration No. 47,743  
**Andrews Kurth LLP**  
1350 I Street, NW  
Suite 1100  
Washington, DC 20005  
Tel. (202) 662-2736  
Fax (202) 662-2739